REMARKS

The Examiner has rejected claims 1-8 under 35 U.S.C. 103(a) as being obvious in view of Thornton, "Linux on the System/390" and U.S. Patent 6,725,370 issued to Sakakura.

In responding to the Applicant's earlier arguments (presented October 11, 2005), the Examiner appears to have mischaracterized the Applicant's arguments. The Applicant is not arguing that Sakura does not teach access control. Rather, the Applicant is arguing that neither reference teaches the network management system aspect of the claimed invention. Each of the Applicant's previous arguments reflects this. As previously argued, the present invention is not directed to a specific method of implementing compartments, but rather to the usage of the compartment method to provide a novel approach to network management of communication networks. This is useful in network management of telecommunication systems and network elements therein, since network elements can be shared by independent operators from different carriers who wish to protect access to their respective network management systems.

One problem may be that the Examiner, in the Final Action, is rejecting claims 1, 2, and 8 simultaneously, using a single set of arguments. This has led to confusion as to where elements of each claim are taught by Thornton and Sakakura, in particular with respect to the network management system of claim 1. The Examiner is kindly requested to consider each claim individually, and if it is maintained that the claims are obvious in view of Thornton and Sakakura, to present arguments for each claim individually so that a clear response can be presented if necessary.

Claim 1 is directed to a network management system sharable by a plurality of operators. This is a feature not taught or suggested by either Thornton or Sakakura. In the Advisory Action dated June 23, 2006, the Examiner states that Sakakura teaches a network management system in Figure 1. Figure 1 of Sakakura shows portions of a network, but shows no network management system, nor does the describing text at column 7 lines 40-57. The Examiner also states that Sakakura teaches this element in Figure 5 and column 2 lines 21-67. Figure 5 of Sakakura shows a shared memory and a shared disk sector in locked status, and does not in any way show a network management system. Column 2 lines 21-67 simply recites a portion of claim 1, and

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nowhere teaches a network management system. The Examiner states that "if applicant's network management system is different from network management system of Sakakura, applicant is required to specify how the current application network management system is different." However, Sakakura does not teach a network management system.

In responding to the Applicant's arguments presented October 11, 2005, the Examiner states at page 3 of the Final Action dated January 9, 2006 that "Shared data storage unit includes a plurality of data storage areas, which divides a shared data accessed by the first and second network system, and stores the divided shared data to the plurality of data storing area (claim 11, and fig. 5)". This is irrelevant to the arguments presented, that neither Thornton nor Sakakura teach a network management system. Nowhere does figure 5 teach a network management system. Claim 11 does not even teach a first and second network system, and even if the first and second server of claim 11 were considered to be a first and second network system, nowhere does claim 11 teach a network management system. The Examiner also states "Therefore the network management system of the storage server has a memory ... the network management system validates the access request (column 2 lines 21-67)". This objection is unsupported by the teachings of Sakakura. Nowhere does column 2 lines 21-67 discuss a network management system.

Claim 1 includes the limitation whereby each operator accesses the network management system. As explained above, the Examiner has not shown where the cited references teach a network management system, and hence also not shown where the cited references teach that each operator accesses a network management system.

Claim 1 also includes common operations software within the network management system. Operations software is distinct from an operating system. Claim 1 refers to a compartmented operating system, which is what Thornton appears to teach (virtual System/390 operating systems). Claim 1 also includes common operations software as an element distinct from the compartmented operating system. Common operations software is described in the description of the present application at paragraph [0016] and illustrated in Figure 2 as elements 30 and 32. The common operations software is the "same software code ... operating as two separate processes" (paragraph [0018]). "Since the software is the same for every operator updates and maintenance are easier than in the prior art" (paragraph [0019]). It is this compartmentalization of common operations software which allows network managers

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to manage their networks in isolation from each others' processes. While Thornton may teach a compartmented operating system, Thornton does not teach common operations software operating within those compartments. This is also not a feature taught by Sakakura.

Claim 2 is directed to a network element in a communications system. While Sakakura teaches access to compartmented servers in a computer system, Sakakura does not teach the use of network elements in a.communication system. While the various boxes in Figure 1 and 9 of Sakakura may be considered elements in a network, they are not "network elements in a communication system" as the term is understood in the industry and as used in the description. See for example paragraph [0002] of the present application, which discusses network elements and network management systems, information flow, and independent competing operators who do not wish other operators to have access to the network management systems. All of these features are characteristic of a network element, such as a router, operating in a large scale telecommunication system. The Applicant respectfully submits that the servers 103 and 105 of Figure 1 of Sakakura, and the first server and the second server of claim 11, can not be considered to be "network elements in a communications system".

Claim 2 also includes common operations software within the network element of a communications system. Operations software is distinct from an operating system. Claim 2 refers to a compartmented operating system, which is what Thornton appears to teach (virtual System/390 operating systems). Claim 2 also includes common operations software as an element distinct from the compartmented operating system. Common operations software is described in the description of the present application at paragraph [0016] and illustrated in Figure 2 as elements 30 and 32. The common operations software is the "same software code ... operating as two separate processes" (paragraph [0018]). "Since the software is the same for every operator updates and maintenance are easier than in the prior art" (paragraph [0019]). It is this compartmentalization of common operations software which allows network managers to manage their networks in isolation from each others' processes. While Thornton may teach a compartmented operating system, Thornton does not teach common operations software operating within those compartments. This is also not a feature taught by Sakakura.

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Claim 8 is directed to a method of controlling access to a network element in a communications system. While Sakakura teaches access to compartmented servers in a computer system, Sakakura does not teach the use of network elements in a communication system. While the various boxes in Figure 1 and 9 of Sakakura may be considered elements in a network, they are not "network elements in a communication system" as the term is understood in the industry and as used in the description. See for example paragraph [0002] of the present application, which discusses network elements and network management systems, information flow, and independent competing operators who do not wish other operators to have access to the network management systems. All of these features are characteristic of a network element, such as a router, operating in a large scale telecommunication system. The Applicant respectfully submits that the servers 103 and 105 of Figure 1 of Sakakura, and the first server and the second server of claim 11, can not be considered to be "network elements in a communications system".

Claim 8 also includes providing common operations software within the network element of a communications system. Operations software is distinct from an operating system. Claim 8 refers to a compartmented operating system, which is what Thornton appears to teach (virtual System/390 operating systems). Claim 8 also includes providing common operations software as an element distinct from the compartmented operating system. Common operations software is described in the description of the present application at paragraph [0016] and illustrated in Figure 2 as elements 30 and 32. The common operations software is the "same software code ... operating as two separate processes" (paragraph [0018]). "Since the software is the same for every operator updates and maintenance are easier than in the prior art" (paragraph [0019]). It is this compartmentalization of common operations software which allows network managers to manage their networks in isolation from each others' processes. While Thornton may teach a compartmented operating system, Thornton does not teach common operations software operating within those compartments. This is also not a feature taught by Sakakura.

Claims 3 to 7 are dependent on claim 2, and include the same limitations discussed above. For the reasons discussed above, the Examiner has not shown where every element of claims 1 to 8 are taught by Thornton or Sakakura, either individually

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or together. The Applicant therefore respectfully submits that a *prima facie* case of obviousness has not been established against claims 1 to 8.

In view of the foregoing, it is believed that the claims at present on file are in condition for allowance. Reconsideration and action to this end is respectfully requested.

Respectfully submitted,

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